

FORM PTO-1449 U.S. Department of Commerce (Rev. 4/92) Patent and Trademark Office  <b>INFORMATION DISCLOSURE          STATEMENT BY APPLICANT</b>  (Use several sheets if necessary)	<b>ATTY. DOCKET NO.</b> 501.35478CX23	<b>SERIAL NO.</b> Not yet assigned
	<b>APPLICANT</b> MIWA, et al	
	<b>FILING DATE</b> March 29, 2004	<b>GROUP</b> 2818

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILE IF APPL
MS	4 9 6 4 0 7 9	10/90	Devin	365	185.03	—
	5 3 6 5 4 8 6	11/94	Schreck	365	185.03	—
	5 4 1 2 6 0 1	5/95	Sawada et al	365	185.03	—
	5 8 3 1 9 0 0	11/98	Miyamoto	365	185.03	—
	5 7 4 5 4 0 9	4/98	Wong et al	365	185.03	—
	5 5 5 5 2 0 4	9/96	Endoh et al	365	189.01	—
MS	5 1 5 1 3 8 7	9/92	Brady et al	437	191	4/30/01
	5 0 8 4 4 1 7	1/92	Joshi et al	437	192	3/13/01
	5 0 6 9 5 5 4	10/91	Spinner et al	437	193	6/23/01
	5 1 7 2 3 3 8	12/92	Mehrotra et al	365	185.03	—
	5 1 3 8 5 7 6	8/92	Madurawe	365	185.03	—
MS	5 4 8 7 0 3 6	1/96	Akaogi et al	365	185.23	—

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	ABSTRACT YES
MS	5 9 1 2 1 6 9 6	7/84	Japan	—	—	XX
	4 2 3 8 1 9 6	8/92	Japan	—	—	—
MS	4 5 7 2 9 4	2/92	Japan	—	—	—

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

MS	Digest of Technical Papers, ATP 2.1: A 3.3V 128Mb Multi-level NAND Flash Memory for Mass Storage Applications, T. Jung, et al., ISSCC98/Session 2/Flash Memory/Paper TP 2.1, 1998 IEEE International State Circuits Conf.
MS	Betty Prince, "Semiconductor Memories", 1983, Wiley, 2 <sup>nd</sup> Edition, pp. 620-621.

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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
MT	5 6 7 7 8 6 8	10/97	Takahashi, et al	365	185	—
	5 7 6 8 1 9 3	6/98	Lee, et al	365	185.25	—
	5 7 5 7 6 9 9	5/98	Takeshima, et al	365	185.24	—
	5 7 9 6 6 5 2	8/98	Takeshima, et al	365	185.03	—
MT	5 7 5 4 4 6 9	5/98	Hung, et al	365	185.03	—
	5 7 4 8 5 3 3	5/98	Dunlap, et al	365	185.19	—
	5 7 5 4 4 7 5	5/98	Bill, et al	365	185.25	—
	5 6 8 7 1 1 4	11/97	Khan	365	185.03	—
MT	5 7 6 8 1 8 8	6/98	Park, et al	365	185.03	—
	5 4 4 0 5 0 5	8/95	Fazio, et al	365	45	—
	5 4 5 0 3 6 3	9/95	Christopherson	365	205	—
	5 1 6 3 0 2 1	11/92	Mehrotra, et al	365	185	—
	5 7 6 8 1 9 1	6/98	Choi, et al	365	185.22	—
	5 5 6 6 1 2 5	10/96	Fazio	365	45	—
	5 2 0 0 9 2 0	4/93	Norman, et al	365	185	—
	5 6 7 5 5 3 7	10/97	Bill, et al	365	185.22	—
MT	4 8 6 0 2 5 8	8/89	Fruhauf, et al	365	194	—

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df	5 9 1 5 1 0 5	6/99	Farmwald et al			
	6 0 3 8 1 6 5	3/00	Miwa	365	185.03	
	4 4 3 5 7 8 6	3/84	Tickle	365	185	
df	5 6 9 4 3 5 7	12/97	Mori	365	185.03	

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLAS S	ABSTRACT	
						YES	NO
df	6 2 6 4 9 3	2/87	Japan	---	---	XX	
	6 2 3 4 3 9 8	2/87	Japan	---	---	XX	
	6 2 2 5 7 6 9 9	11/87	Japan	---	---	XX	
	6 2 2 9 8 9 9 9	12/87	Japan	---	---	XX	
	6 3 2 7 6 7 9 1	11/88	Japan	---	---	XX	
	2 4 0 1 9 8	2/90	Japan	---	---	XX	
	2 2 6 0 2 9 8	10/90	Japan	---	---	XX	
	3 2 3 7 6 9 2	10/91	Japan	---	---	XX	
	4 5 7 2 9 4	2/92	Japan	---	---	XX	
df	4 1 8 4 7 9 4	7/92	Japan	---	---	XX	
	4 2 3 8 1 9 6	8/92	Japan	---	---	XX	
	0 6 1 3 1 8 8 1	5/94	Japan	---	---	XX	
	0 6 1 9 5 9 8 7	7/94	Japan	---	---	XX	
df	0 6 2 6 7 2 8 5	9/94	Japan	---	---	XX	

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def	5 3 2 7 3 9 0	7/94	Takasugi	365	230	—
	5 4 7 3 5 7 0	12/95	Sato et al	365	221	—
	6 0 1 1 8 8 0	1/00	Tani et al	382	312	—
	6 3 6 6 4 9 5	4/02	Miwa et al	365	185.03	—
	6 4 5 9 6 1 4	10/02	Miwa et al	365	185.03	—
ms	6 0 4 4 0 3 1	3/00	Iadanza et al	365	230.03	—

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						YES NO
def	1 2 7 3 2 9 4	11/89	Japan	—	—	XX
	0 7 0 5 7 4 8 4	3/95	Japan	—	—	XX
	0 2 1 6 4 9 7		Japan	—	—	X
	0 6 3 0 9 8 9 0	11/94	Japan	—	—	XX
	0 1 2 3 8 4 2	9/79	Japan	—	—	
	1 1 3 4 7 9 3	5/89	Japan	—	—	X
	5 2 1 0 9 9 1	8/93	Japan	—	—	XX
	6 2 5 1 5 9 1	9/94	Japan	—	—	X
	7 9 3 9 7 9	4/95	Japan	—	—	XX
ms	2 0 4 0 1 9 8	2/90	Japan	—	—	XX

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AT	5 2 9 7 0 2 9	3/94	Nakai et al	365	238.5	—
	4 6 9 2 8 8 6	9/87	Miki et al	364	718	—
	5 4 2 2 8 5 8	6/95	Mizukami et al	365	233	—
	5 5 3 9 6 8 8	7/96	Yiu, et al	365	185.14	—
	5 5 4 4 0 9 9	8/96	Hara	365	185.19	—
AT	5 6 7 7 8 6 9	10/97	Fazio, et al	365	185.03	—
	5 6 1 5 1 5 3	3/97	Yiu, et al	365	185.19	—

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	5 8 3 1 9 0 0	11/98	Miyamoto	365	185.03	—
	5 7 4 5 4 0 9	4/98	Wong et al	365	185.03	—
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	5 0 5 9 5 5 4	10/91	Spinner et al	437	193	6/23/01
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4 2 3 8 1 9 6	8/92	Japan	—	—	—
MT 4 5 7 2 9 4	2/92	Japan	—	—	—

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MT	Digest of Technical Papers, ATP 2.1: A 3.3V 128Mb Multi-level NAND Flash Memory for Mass Storage Applications, T. Jung, et al., ISSCC98/Session 2/Flash Memory/Paper TP 2.1, 1998 IEEE International State Circuits Conf.
MT	Betty Prince, "Semiconductor Memories", 1983, Wiley, 2 <sup>nd</sup> Edition, pp. 620-621.

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